

# REQUEST FOR ACTION (RFA) RESPONSE

**GLAST LAT Project**  
**Calorimeter Peer Review**

**17 – 18 March 2003**

<b>Action Item:</b>	CAL – 018
<b>Presentation Section:</b>	Electronics
<b>Submitted by:</b>	B. Graf (F. Blanchette)

**Request:** Grounding of composite structure - RE pg 7-7, complete diagram including more detail. Show how grounding of the composite structure will be accomplished.

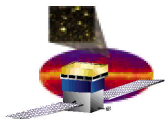
**Reason / Comment:** The grounding diagram does not show the composite structure being grounded, so there is the possibility for an ESD event. All surfaces must be kept at the same potential.

**Response: 10 April 2003**

The attached view graph is a correction to the presentation that addresses the grounding of the composite structure relative to the rest of the CAL module. The carbon composite structure is well grounded to the aluminum structure that surrounds it via titanium inserts embedded in the composite. These inserts provide solid mechanical and electrical attach points for the baseplate, closeout plates, PWBs and side panels.

The CAL grounding plan is LAT-MD-00272. A link to it is

<http://hese.nrl.navy.mil/glast/CM/plan/CalGroundingPlan-LAT-MD-00272-02.pdf>



# Architecture, Grounding Diagram

- Calorimeter Circuit boards are grounded to the Cal structure for low noise PIN diode signal.
  - Structure comprised of aluminum, titanium, stainless steel, and carbon composite.
  - Low resistive path, measured  $< 0.5$  ohm, between any 2 points in structure.
  - Diodes are located around periphery of carbon composite structure.

